## **LISTING OF CLAIMS:**

1. (Currently Amended) A method, implemented in a data processing system, for determining a complexity of an enterprise information resource management system, the enterprise information resource management system being used to contain an ontology into which a plurality of enterprise data assets are mapped, the ontology including a plurality of model constructs, the enterprise data assets including a plurality of assets constructs, and the mappings between the enterprise data assets and the ontology including a plurality of mapping constructs, the method comprising:

receiving (i) a quantity of distinct asset constructs, denoted by  $C_{ASSET}$ , (ii) a quantity of distinct mapping constructs, denoted by  $C_{MAPPING}$ , and (iii) a quantity of distinct model constructs, denoted by  $C_{MODEL}$ ;

evaluating a metric of complexity, denoted by M, for [[an]] the enterprise information resource management system having a capacity corresponding to  $C_{ASSET}$ ,  $C_{MAPPINGL}$  and  $C_{MODEL}$ , wherein the metric of complexity is evaluated according to a formula

$$M = f(C_{ASSET}, C_{MAPPING}, C_{MODEL}, X),$$

where f is a real-valued function of three or more real-valued parameters and X denotes optional zero or more additional parameters; and

using the metric M within a transaction processing system, for license of the enterprise information resource management system.

- 2. (Currently Amended) The method of claim 1 wherein the plurality of <u>enterprise</u> data assets include <u>conformed</u> assets that conform to a general data schema that uses element group asset constructs and element asset constructs.
- 3. (Currently Amended) The method of claim 2 wherein the general data schema [[is]] comprises a relational database schema, [[and]] the element group asset constructs [[are]] comprise database tables, and the element asset constructs [[are]] comprise columns of database tables.

- 4. (Currently Amended) The method of claim 2 wherein the general data schema [[is]] <u>comprises</u> an XML schema, [[and]] the element group asset constructs [[are]] <u>comprise</u> XML complex types, and the element asset constructs [[are]] <u>comprise</u> XML elements.
- 5. (Currently Amended) The method of claim 2 wherein the general data schema [[is]] <u>comprises</u> a Cobol Copy Book, [[and]] the element group asset constructs [[are]] <u>comprise</u> Cobol group items, and the element asset constructs [[are]] comprise Cobol elementary items.
- 6. (Currently Amended) The method of claim 2 wherein the ontology [[is]] <u>comprises</u> an ontology model, [[and]] wherein the model constructs include ontology classes and [[their]] properties <u>of the ontology classes</u>, and <u>wherein the model constructs further include</u> business rules that inter-relate the properties.
- 7. (Currently Amended) The method of claim 6 wherein the mapping constructs include mappings of element group asset constructs into ontology classes and <u>further include mappings</u> mapping of element asset constructs into ontology properties.
- 8. (Original) The method of claim 6 wherein the function  $f(C_{ASSET}, C_{MAPPING}, C_{MODEL})$  is a step function of the form

$$f(C_{ASSET}, C_{MAPPING}, C_{MODEL}, X) = f_n(X)$$
, if  $C_{n-1} < C \le C_n$ ,

where C is the total number of constructs,  $C = C_{ASSET} + C_{MAPPING} + C_{MODEL}$ , and where  $C_0$ ,  $C_1$ ,  $C_2$ ,... are cutoff points.

9. (Original) The method of claim 6 wherein the function  $f(C_{ASSET}, C_{MAPPING}, C_{MODEL}, X)$  is a step function of the form

$$f(C_{ASSET}, C_{MAPPING}, C_{MODEL}, X) = f_n(X), \text{ if } C_{n-1} < C \le C_n,$$

where C is a weighted average  $C = W_{ASSET}C_{ASSET} + W_{MAPPING}C_{MAPPING} + W_{MODEL}C_{MODEL}$  and where  $W_{ASSET}$ ,  $W_{MAPPING}$  and  $W_{MODEL}$  are respective weighting factors, and where  $C_0$ ,  $C_1$ ,  $C_2$ ,... are cutoff points.

- 10. (Currently Amended) The method of claim 1 wherein the enterprise information resource management system generates results for tasks, and wherein the metric M also depends on [[the]] a number of distinct results generated and saved.
- 11. (Original) The method of claim 10 wherein the results include data transformations.
- 12. (Original) The method of claim 10 wherein the results include SQL queries.
- 13. (Original) The method of claim 10 wherein the results include XSLT scripts.
- 14. (Currently Amended) The method of claim 1 wherein the enterprise information resource management system generates scripts for producing reports, and wherein the metric *M* also depends on [[the]] a number of distinct report scripts generated and saved.
- 15. (Currently Amended) The method of claim 1 wherein the enterprise information resource management system records metadata, and wherein the metric M also depends on [[the]] a number of distinct metadata records.
- 16. (Currently Amended) A method, implemented in a data processing system, for determining a complexity of a metadata repository including a plurality of metadata constructs, the comprising:

receiving a quantity of distinct metadata constructs, denoted by C;

evaluating a metric of complexity, denoted by M, for a metadata repository having a capacity corresponding to C, wherein the metric of complexity is evaluated according to a formula

$$M = f(C, X),$$

where f is a real-valued function of one or more real-valued parameters and X denotes optional zero or more additional parameters; and

using the metric M within a transaction processing system, for license of the metadata repository.

- 17. (Currently Amended) The method of claim 16 wherein <u>the</u> metadata constructs [[are]] <u>comprise</u> instances of meta-model constructs.
- 18. (Currently Amended) The method of claim 17 wherein the meta-data constructs [[are]]  $\underline{\text{comprise}}$  constructs for meta-models of asset schemas, and wherein the metric M also depends on [[the]]  $\underline{a}$  number of meta-model constructs.
- 19. (Currently Amended) The method of claim 17 wherein at least one meta-model [[is]] comprises a schema for relational database schemas, and wherein at least one metadata construct corresponds to a table of a relational database schema.
- 20. (Currently Amended) The method of claim 17 wherein at least one meta-model [[is]] comprises a schema for XML schemas, and wherein at least one metadata construct corresponds to a complex element of an XML schema.
- 21. (Currently Amended) A method, implemented in a data processing system, for determining <u>a</u> complexity of a metadata repository including a plurality of metadata constructs, the metadata constructs being instances of meta-model constructs for meta-models of schemas for data assets, the method comprising:

receiving a quantity of distinct meta-model constructs, denoted by C;

evaluating a metric of complexity, denoted by M, for a metadata repository having a capacity corresponding to C, wherein the metric of complexity is evaluated according to a formula

M = f(C, X),

where f is a real-valued function of one or more real-valued parameters and X denotes optional zero or more additional parameters; and

using the metric M within a transaction processing system, for license of the metadata repository.

- 22. (Currently Amended) The method of claim 21 wherein at least one meta-model [[is]] comprises a schema for relational database schemas, and wherein at least one metadata construct corresponds to a table of a relational database schema.
- 23. (Currently Amended) The method of claim 21 wherein at least one meta-model [[is]] comprises a schema for XML schemas, and wherein at least one metadata construct corresponds to a complex element of an XML schema.
- 24. (Original) The method of claim 21 wherein the meta-model constructs include descriptors for data assets.
- 25. (Currently Amended) The method of claim 21 wherein the optional zero or more additional parameters include a parameter for a number of users of the repository.
- 26. (Currently Amended) The method of claim 21 wherein the optional zero or more additional parameters include a parameter for a number of available features.
- 27. (Currently Amended) The method of claim 26 wherein an available feature [[is]] comprises [[the]] an ability to change a meta-model.
- 28. (Currently Amended) The method of claim 26 wherein an available feature [[is]] comprises [[the]] an ability to batch scan metadata.
- 29. (Currently Amended) A system for determining <u>a</u> complexity of an enterprise information resource management system, the enterprise information resource management system being used to contain an ontology into which a plurality of enterprise data assets are

mapped, the ontology including a plurality of model constructs, the enterprise data assets including a plurality of assets constructs, and the mappings between the <u>enterprise</u> data assets and the ontology including a plurality of mapping constructs, <u>the method</u> comprising:

an input device for receiving (i) a quantity of distinct asset constructs, denoted by  $C_{ASSET}$ , (ii) a quantity of distinct mapping constructs, denoted by  $C_{MAPPING}$ , and (iii) a quantity of distinct model constructs, denoted by  $C_{MODEL}$ ;

a processor coupled to said input device, the processor for evaluating a metric of complexity, denoted by M, for [[an]] the enterprise information resource management system with capacity corresponding to  $C_{ASSET}$ ,  $C_{MAPPINGL}$  and  $C_{MODEL}$ , wherein the metric of complexity is evaluated according to a formula

$$M = f(C_{ASSET}, C_{MAPPING}, C_{MODEL}, X),$$

where f is a real-valued function of three or more real-valued parameters and X denotes optional zero or more additional parameters; and

a transaction processing system <u>for</u> receiving the metric M and for using the metric M for licensing the enterprise information resource management system.

- 30. (Currently Amended) The system of claim 29 wherein the plurality of <u>enterprise</u> data assets include assets that conform to a general data schema that uses element group asset constructs and element asset constructs.
- 31. (Currently Amended) The system of claim 30 wherein the general data schema [[is]] comprises a relational database schema, [[and]] the element group asset constructs [[are]] comprise database tables, and the element asset constructs [[are]] comprise columns of database tables.
- 32. (Currently Amended) The system of claim 30 wherein the general data schema [[is]] comprises an XML schema, [[and]] the element group asset constructs [[are]] comprise XML complex types, and the element asset constructs [[are]] comprise XML elements.

- 33. (Currently Amended) The system of claim 30 wherein the general data schema [[is]] comprises a Cobol Copy Book, [[and]] the element group asset constructs [[are]] comprise Cobol group items, and the element asset constructs [[are]] comprise Cobol elementary items.
- 34. (Currently Amended) The system of claim 30 wherein the ontology [[is]] comprises an ontology model, [[and]] wherein the model constructs include ontology classes and [[their]] properties of the ontology classes, and wherein the model constructs further include business rules that inter-relate the properties.
- 35. (Currently Amended) The system of claim 34 wherein the mapping constructs include mappings of element group asset constructs into ontology classes and <u>further include mappings</u> mapping of element asset constructs into ontology properties.
- 36. (Original) The system of claim 34 wherein the function  $f(C_{ASSET} C_{MAPPING}, C_{MODEL}, X)$ , is a step function of the form

$$f(C_{ASSET}, C_{MAPPING}, C_{MODEL}, X) = f_n(X)$$
, if  $C_{n-1} < C \le C_n$ ,

where C is the total number of constructs,  $C = C_{ASSET} + C_{MAPPING} + C_{MODEL}$  and where  $C_0$ ,  $C_1$ ,  $C_2$ ,... are cutoff points.

37. (Original) The system of claim 34 wherein the function  $f(C_{ASSET}, C_{MAPPING}, C_{MODEL}, X)$  is a step function of the form

$$f(C_{ASSET}, C_{MAPPING}, C_{MODEL}, X) = f_n(X)$$
, if  $C_{n-1} < C \le C_n$ ,

where C is a weighted average  $C = W_{ASSET} C_{ASSET} + W_{MAPPING} C_{MAPPING} + W_{MODEL} C_{MODEL}$ , and where  $W_{ASSET}$ ,  $W_{MAPPING}$  and  $W_{MODEL}$  are respective weighting factors, and where  $C_0$ ,  $C_1$ ,  $C_2$ ,... are cutoff points.

- 38. (Currently Amended) The system of claim 29 wherein the enterprise information resource management system generates results for tasks, and wherein the metric M also depends on [[the]] a number of distinct results generated and saved.
- 39. (Original) The system of claim 38 wherein the results include data transformations.
- 40. (Original) The system of claim 38 wherein the results include SQL queries.
- 41. (Original) The system of claim 38 wherein the results include XSLT scripts.
- 42. (Currently Amended) The system of claim 29 wherein the enterprise information resource management system generates scripts for producing reports, and wherein the metric *M* also depends on [[the]] a number of distinct report scripts generated and saved.
- 43. (Currently Amended) The system of claim 29 wherein the enterprise information resource management system records metadata, and wherein the metric M also depends on [[the]]  $\underline{a}$  number of distinct metadata records.
- 44. (Currently Amended) A system for determining <u>a</u> complexity of a metadata repository including a plurality of metadata constructs, <u>the system</u> comprising:

an input device for receiving a quantity of distinct metadata constructs, denoted by C; a processor coupled to said input device, the processor for evaluating a metric of complexity, denoted by M, for a metadata repository having a capacity corresponding to C, according to a formula

$$M = f(C, X),$$

where f is a real-valued function of one or more real-valued parameters and X denotes optional zero or more additional parameters; and

a transaction processing system for using the metric M for licensing the metadata repository.

- 45. (Currently Amended) The system of claim 44 wherein the plurality of metadata constructs [[are]] comprise instances of meta-model constructs.
- 46. (Currently Amended) The system of claim 45 wherein the meta-data constructs [[are]] comprise constructs for meta-models of asset schemas, and wherein the price P metric M also depends on [[the]] a number of meta-model constructs.
- 47. (Currently Amended) The system of claim 45 wherein at least one meta-model [[is]] comprises a schema for relational database schemas, and wherein at least one metadata construct corresponds to a table of a relational database schema.
- 48. (Currently Amended) The system of claim 45 wherein at least one meta-model [[is]] comprises a schema for XML schemas, and wherein at least one metadata construct corresponds to a complex element of an XML schema.
- 49. (Currently Amended) A system for determining <u>a</u> complexity of a metadata repository including a plurality of metadata constructs, the metadata constructs being instances of metamodel constructs for meta-models of schemas for data assets, <u>the system</u> comprising:

an input device for receiving a quantity of distinct meta-model constructs, denoted by C; a processor coupled to said input device, the processor for evaluating a metric of complexity, denoted by M, for a metadata repository having a capacity corresponding to C, wherein the metric of complexity is evaluated according to a formula

$$M = f(C, X),$$

where f is a real-valued function of one or more real-valued parameters and X denotes optional zero or more additional parameters; and

a transaction system <u>for</u> receiving the metric M, <u>the transaction system further for using</u> the metric M for license of the metadata repository.

- 50. (Currently Amended) The system of claim 49 wherein at least one meta-model [[is]] comprises a schema for relational database schemas, and wherein at least one metadata construct corresponds to a table of a relational database schema.
- 51. (Currently Amended) The system of claim 49 wherein at least one meta-model [[is]] comprises a schema for XML schemas, and wherein at least one metadata construct corresponds to a complex element of an XML schema.
- 52. (Original) The system of claim 49 wherein the meta-model constructs include descriptors for data assets.
- 53. (Currently Amended) The system of claim 49 wherein the optional zero or more additional parameters include a parameter for a number of users of the repository.
- 54. (Currently Amended) The system of claim 49 wherein the optional zero or more additional parameters include a parameter for a number of available features.
- 55. (Currently Amended) The system of claim 54 wherein an available feature [[is the]] comprises an ability to change a meta-model.
- 56. (Currently Amended) The system of claim 54 wherein an available feature [[is the]] comprises an ability to batch scan metadata.
- 57. (Currently Amended) A computer-readable storage medium storing program code for causing a computer to determine <u>a</u> complexity of an enterprise information resource management system, the enterprise information resource management system being used to contain an ontology into which a plurality of enterprise data assets are mapped, the ontology including a plurality of model constructs, the enterprise data assets including a plurality of assets constructs, and the mappings between the <u>enterprise</u> data assets and the ontology including a plurality of mapping constructs, <u>wherein the program code causes the computer to determine the complexity</u> by performing the steps of:

determining (i) a quantity of distinct asset constructs, denoted by  $C_{ASSET}$ , (ii) a quantity of distinct mapping constructs, denoted by  $C_{MAPPING}$ , and (iii) a quantity of distinct model constructs, denoted by  $C_{MODEL}$ ;

evaluating a metric of complexity, denoted by M, for [[an]] the enterprise information resource management system having a capacity corresponding to  $C_{ASSET}$ ,  $C_{MAPPING}$  and  $C_{MODEL}$  wherein the metric of complexity is evaluated according to a formula

$$M = f(C_{ASSET}, C_{MAPPING}, C_{MODEL}, X),$$

where f is a real-valued function of three or more real-valued parameters and X denotes optional zero or more additional parameters; and

using the metric M within a transaction processing system, for license of the enterprise information resource management system.

58. (Currently Amended) A computer-readable storage medium storing program code for causing a computer to determine <u>a</u> complexity of a metadata repository including a plurality of metadata constructs, <u>wherein the program code causes the computer to determine the complexity</u> by performing the steps of:

determining a quantity of distinct metadata constructs, denoted by C;

evaluating a metric of complexity, denoted by M, for a metadata repository having a capacity corresponding to C, wherein the metric of complexity is evaluated according to a formula

$$M = f(C, X),$$

where f is a real-valued function of one or more real-valued parameters and X denotes optional zero or more additional parameters; and

using the metric M within a transaction processing system, for license of the metadata repository.

59. (Currently Amended) A computer-readable storage medium storing program code for causing a computer to determine <u>a</u> complexity of a metadata repository including a plurality of metadata constructs, the metadata constructs being instances of meta-model constructs for metamodels of schemas for data assets, <u>wherein the program code causes the computer to determine the complexity</u> by performing the steps of:

determining a quantity of distinct meta-model constructs, denoted by C;

evaluating a metric of complexity, denoted by M, for a metadata repository having a capacity corresponding to C, wherein the metric of complexity is evaluated according to a formula

$$M = f(C, X),$$

where f is a real-valued function of one or more real-valued parameters and X denotes optional zero or more additional parameters; and

using the metric M within a transaction processing system, for license of the metadata repository.

- 60. (Currently Amended) The method of claim 1 further comprising limiting the complexity of the enterprise information resource management system so as not to exceed to a specified limit by restricting the quantities  $C_{ASSET}$ ,  $C_{MAPPINGL}$  and  $C_{MODEL}$ .
- 61. (Previously Presented) The method of claim 60 wherein the specified limit is determined from a license key for the enterprise information resource management system.
- 62. (Previously Presented) The method of claim 60 wherein different versions of the enterprise information resource management system have different specified limits.
- 63. (Currently Amended) The method of claim 16 further comprising limiting the complexity of the enterprise information resource management system so as not to exceed to a specified limit by restricting the quantity C.

- 64. (Previously Presented) The method of claim 63 wherein the specified limit is determined from a license key for the enterprise information resource management system.
- 65. (Previously Presented) The method of claim 63 wherein different versions of the enterprise information resource management system have different specified limits.
- 66. (Currently Amended) The method of claim 21 further comprising limiting the complexity of the enterprise information resource management system so as not to exceed to a specified limit, by restricting the quantity C.
- 67. (Previously Presented) The method of claim 66 wherein the specified limit is determined from a license key for the enterprise information resource management system.
- 68. (Previously Presented) The method of claim 66 wherein different versions of the enterprise information resource management system have different specified limits.
- 69. (Currently Amended) The system of claim 29 further comprising a controller restricting the quantities  $C_{ASSET}$ ,  $C_{MAPPINGL}$  and  $C_{MODEL}[[,]]$  as to ensure such that the complexity of the enterprise information resource management system does not exceed a specified limit.
- 70. (Previously Presented) The system of claim 69 wherein the specified limit is determined from a license key for the enterprise information resource management system.
- 71. (Previously Presented) The system of claim 69 wherein different versions of the enterprise information resource management system have different specified limits.
- 72. (Currently Amended) The system of claim 44 further comprising a controller restricting the quantities C[[,]] so as to ensure such that the complexity of the enterprise information resource management system does not exceed a specified limit.

- 73. (Previously Presented) The system of claim 72 wherein the specified limit is determined from a license key for the enterprise information resource management system.
- 74. (Previously Presented) The system of claim 72 wherein different versions of the enterprise information resource management system have different specified limits.
- 75. (Currently Amended) The system of claim 49 further comprising a controller restricting the quantities C[[,]] so as to ensure such that the complexity of the enterprise information resource management system does not exceed a specified limit.
- 76. (Previously Presented) The system of claim 75 wherein the specified limit is determined from a license key for the enterprise information resource management system.
- 77. (Previously Presented) The system of claim 75 wherein different versions of the enterprise information resource management system have different specified limits.